

Memorandum

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To: Commissioner Robert Pernell, Presiding Member
Commissioner William J. Keese, Chairman and Associate Member

From: California Energy Commission - Marc Pryor
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Subject: **POTRERO POWER PLANT UNIT 7 PROJECT (00-AFC-4) - ISSUES IDENTIFICATION REPORT**

Attached is the staff's Issue Identification Report for the Potrero Power Plant Unit 7 Project proposal (00-AFC-4). This report serves as a preliminary scoping document that identifies the issues that the Energy Commission staff believes will require careful attention and consideration. Energy Commission staff will present the issues report at the Siting Committee's scheduled Informational Hearing on November 9, 2000, at the Potrero Hill Neighborhood House, 953 De Haro Street in San Francisco, California.

cc: Docket (00-AFC-4)
Proof of Service List

Attachment

MSP:msp

POTRERO POWER PLANT UNIT 7 PROJECT

(00-AFC-4)

November 3, 2000

ISSUES IDENTIFICATION REPORT

CALIFORNIA ENERGY COMMISSION

Energy Facilities Siting and Environmental Protection Division

**ISSUE IDENTIFICATION REPORT
POTRERO POWER PLANT UNIT 7 PROJECT
(00-AFC-4)**

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ISSUES IDENTIFICATION REPORT

Potrero Power Plant Unit 7 Project
(00-AFC-4)

PURPOSE

This report has been prepared by the California Energy Commission staff to inform the Committee and all interested parties of the potential issues that have been identified in the case thus far. These issues have been identified as a result of our discussions with federal, state, and local agencies, and our review of the Potrero Power Plant Unit 7 Project ("Unit 7" or the "project") Application for Certification (AFC), Docket Number 00-AFC-4. The Issue Identification Report contains a project description, summary of potentially significant environmental issues, and a discussion of the proposed project schedule. The staff will address the status of issues and progress towards their resolution in periodic status reports to the Committee.

PROJECT DESCRIPTION

On May 31, 2000, Southern Energy California (SECAL) filed an Application for Certification (AFC) seeking approval from the California Energy Commission (Energy Commission) to construct the Potrero Power Plant Unit 7 Project in the Potrero District of the City and County of San Francisco. Southern Energy Potrero LLC (SEP), a direct subsidiary of SECAL, will own and operate Unit 7 in conjunction with the existing Potrero Power Plant's Unit 3 (a 206-megawatt (MW) baseload steam turbine), and units 4, 5 and 6 (52-MW combustion turbine peaking units). SECAL purchased the Potrero Power Plant from Pacific Gas & Electric (PG&E) in April 1999.

The proposed project would be a nominal 540 MW natural gas-fired, combined cycle power generating facility¹. Pollution controls on each CTG/HRSG "train" will include a Selective Catalytic Reduction (SCR) system to control the emissions of oxides of nitrogen (NO_x), and a CO catalyst to control carbon monoxide emissions. Aqueous ammonia, which is already used at Unit 3, will be used as the reagent in Unit 7's SCR system. Deliveries will be made by tanker trucks and stored in two identical, 20,000-gallon aboveground storage tanks. One tank will be used for Unit 7; the other tank will replace the existing Unit 3 storage.

The existing Potrero site natural gas supply will fuel the proposed Unit 7, and will be connected to a compressor station, which will be part of Unit 7.

¹ The proposed plant will have two Combustion Turbine Generators (CTGs) and one Steam Turbine Generator (STG). Heat generated from each CTG (a combustion cycle) will flow through a separate Heat Recovery Steam Generator (HRSG) where steam will be produced, which will be used to drive the STG (a steam cycle). This two CTG/HRSG and one STG set up is referred to as a "two-on-one combined-cycle configuration."

Water from San Francisco Bay is proposed for circulating cooling purposes at the rate of 158,000 gallons per minute (228 million gallons per day). New water intake structure and discharge systems will be constructed at the shoreline adjacent to Unit 3. This system will provide flows for both Units 3 and 7, and will replace the Unit 3's intake and outflow systems. Discharged circulating cooling water will be returned to the bay via four pipes equipped with diffusion heads that will be located about 700 feet offshore from the plant site. Water supplied by the City of San Francisco's system will be used for the replacement, or "makeup", of water used in the steam production process, evaporative coolers, as well as for wash water and potable water. The combined rate of consumption of this water will be about 50 gallons per minute (72,000 gallons per day).

Interconnection with the state's high voltage transmission system would be through a proposed new Potrero Power Plant Switchyard, located onsite, and two existing PG&E substations. These would be a direct interconnection to PG&E's Potrero Substation adjacent to the Potrero Power Plant, and a separate underground interconnection to the Hunters Point Substation located approximately 1.8 miles to the south of the Potrero Power Plant site.

Unit 7 would be operated as a merchant power facility, selling its energy via direct sales agreements and in the spot market via the California Power Exchange. Energy output and operational levels would vary according to demand in the deregulated California energy market. Electricity prices and operational levels would not be subject to California Public Utilities Commission (CPUC) regulation.

SEP expects the Unit 7 project to cost between \$260 and \$320 million and to be operational by the summer of 2003. SEP's description of the proposed project; the possible impacts to public health, safety and environmental resources; proposed mitigation measures and the project's conformance with federal, state and local laws and standards are contained in the AFC.

POTENTIAL MAJOR ISSUES

This portion of the report contains a discussion of the potential issues the Energy Commission staff has identified to date. The Committee should be aware that this report might not include all of the significant issues that may arise during the case. Discovery is not yet complete, and other parties have not had an opportunity to identify their concerns. The identification of the potential issues contained in this report is based on our judgement of whether any of the following circumstances will occur:

- Potential significant impacts which may be difficult to mitigate;
- Potential areas of noncompliance with applicable laws, ordinances, regulations or standards (LORS);
- Areas of conflict or potential conflict between the parties; or
- Areas where resolution may be difficult or may affect the schedule.

The following table lists all the subject areas evaluated and notes those areas where critical or significant issues have been identified. Even though an area is identified as having no potential issues, it does not mean that an issue will not arise related to the subject area.

For example, disagreements regarding the appropriate conditions of certification may arise between staff and applicant that will require discussion at workshops or even subsequent hearings. However, we do not currently believe such an issue will have an impact on the case schedule or that resolution will be difficult to achieve.

Major Issue	Subject Area	Major Issue	Subject Area
No	Air Quality	No	Worker Safety & Fire Protection
Yes	Environmental Justice	No	Land Use
*	Public Health	No	Project Overview
Yes	Biological Resources	No	Noise
No	Cultural Resources	No	Soil & Water Resources
No	Efficiency and Reliability	No	Traffic and Transportation
No	Facility Design	No	Transmission System Engineering
No	Transmission Line Safety & Nuisance	Yes	Visual Resources
No	Paleontology & Geology	No	Waste Management
No	Hazardous Materials Handling	No	Alternatives
No	Socioeconomics		

* **Potential major issue encompassed by Environmental Justice.**

This report does not limit the scope of staff's analysis throughout this proceeding, but acts to aid in the analysis of potentially significant issues that the Potrero Power Plant proposal poses. The following discussion summarizes each potential issue, identifies the parties needed to resolve the issue, and where applicable, suggests a process for achieving resolution. At this time, staff does not see these potential issues as non-resolvable.

ENVIRONMENTAL JUSTICE

Using 1990 US Census data, information provided by the applicant in the Application for Certification (AFC) shows that there are over 50 percent minorities living within six miles of the proposed project (Potrero 2000a).

In March 2000, Energy Commission Public Health and legal staff met with representatives from the City and County of San Francisco Department of Public Health, City and County of San Francisco, Bayview Hunters Point (BVHP) Health and Environmental Assessment Task Force, City and County of San Francisco Planning Department, BVHP Community Activists, and University of California, San Francisco. The discussion focused on health and environmental issues associated with the Potrero plant and other industrial uses in the Bayview and Potrero neighborhoods.

In response to long-term community concerns with the Potrero Plant, the San Francisco Board of Supervisors initiated a Citizens Advisory Committee on Potrero, chaired by Supervisor Yee. In addition, there are several community groups who are either interested in the project or will participate as Intervenors, including Southeast Alliance for Environmental Justice (SAEJ), Potrero Boosters Association, BVHP Community Activists, and Greenaction. These groups, including representatives from the City and County of San Francisco, held their first meeting on the proposed project on June 29, 2000.

PUBLIC HEALTH

In order to determine and address the potential contribution from the proposed project's emissions, as well as what measures would be required to reduce those emissions to levels that would not impact on people, staff will work with other agencies such as the Bay Area Air Quality Management District, U.S. Environmental Protection Agency, and the City and County of San Francisco. In addition, staff will work with any other organizations that desire to participate.

BIOLOGICAL RESOURCES

BIOLOGICAL AGREEMENT – POTENTIAL SCHEDULE DELAY

Energy Commission staff believes that additional biological resources data must be collected to validate that the data submitted with the Application for Certification accurately reflects current baseline conditions. To this end, Energy Commission staff and Southern Energy Potrero, L.L.C. (SEP) have entered into an agreement.

Provisions of the agreement will result in either: (1) the validation of currently existing baseline data using information derived and interpreted from three months of data collection or; (2) if validation after three months of collection cannot validate currently existing data, data collection would continue in order to obtain one year's worth of data to provide current baseline conditions.

Per the agreement, the applicant has provided a draft survey protocol that a working group is reviewing. The working group is comprised of Energy Commission Staff and representatives of the National Marine Fisheries Service (NMFS), California Department of Fish and Game (CDFG), Bay Conservation and Development Commission (BCDC), Regional Water Quality Control Board, and the City and County of San Francisco. However, the draft protocol did not include the required

draft data collection schedule. This omission may delay implementation of the biological surveys and schedule of the siting case.

Therefore, there are at least two potentials for delays in the project schedule. First is the lack of a proposed survey schedule, and the second is whether the existing baseline data cannot be validated. In recognition of this potential delay, another provision of the agreement is that the applicant will support Energy Commission staff requests for reasonable extensions of deadlines.

VISUAL RESOURCES

Based on a review of the Potrero Power Plant Unit 7 Project Application for Certification (AFC) and a field reconnaissance of the project site and area, three issues of concern regarding visual resources have been identified.

VIEWS FROM POTRERO HILL RESIDENTIAL NEIGHBORHOOD

It is apparent that the closest residential neighborhood to the proposed project (located west of the project site on Potrero Hill, east of and below the Potrero Hill Recreation Center) has views of the project site. The views from the neighborhood may be adversely affected by the proposed project, but the significance of the impact has yet to be determined by Energy Commission staff.

VAPOR PLUME

The AFC visual resources section contains insufficient information regarding exhaust stack vapor plume characteristics (size, frequency, and visibility, both during daytime hours and at nighttime as a result of nighttime illumination) to assess whether or not significant visual impacts associated with plume formation would occur.

COMPLIANCE WITH LAWS, ORDINANCES, REGULATIONS AND STANDARDS

Compliance with laws, ordinances, regulations and standards (LORS) is uncertain at this time for two reasons:

1. The AFC indicates that the applicant's proposed mitigation measure VIS-7 (involving a redesign of the building façade and roof) is integral to compliance with several LORS. However, a redesign of the building has not been accomplished and its effectiveness in achieving LORS compliance is therefore uncertain.
2. The AFC has similarly indicated that the applicant's proposed mitigation measure VIS-5 (off-site planting at Warm Water Cove Park) is integral to compliance with several LORS. However, a planting plan has not been developed or reviewed, and its intended effectiveness in satisfying LORS requirements cannot yet be determined.

Staff will prepare data requests to obtain additional information to address the potential impacts and will work with the agencies that are responsible for building and park issues to address these potential LORS issues.

SCHEDULING

The Energy Commission is currently reviewing: 20 Applications for Certification for power plant projects, of which six are AB 970, four-month expedited projects and one is a Small Power Plant Exemption (SPPE). In addition, Energy Commission staff expects to receive another six AFCs in the next two months. Staff is experiencing a critical staffing workload problem and continues to rely on a consultant team to help with the peak workload. In light of the issues and the workload, staff believes that it will be extremely challenging to meet a 12-month schedule. Staff's proposed 12-month schedule is attached.

STAFF'S PROPOSED SCHEDULE

POTRERO POWER PLANT UNIT 7 PROJECT (00-AFC-4)

DATE	EVENT
May 31, 2000	Potrero Power Plant Unit 7 Project AFC Filed
October 11, 2000	Energy Commission Deems AFC Complete
November 3, 2000	Staff Files Issue Identification Report
November 7, 2000	Data Requests, Set One
November 9, 2000	Information Hearing and Site Visit
November 20, 2000	Data Request Workshop
December 5, 2000	Data Responses Due from Applicant
January 19, 2001	Cal ISO files recommendations regarding Transmission Line Interconnection Study
February 7, 2001	BAAQMD Files Preliminary Determination of Compliance
March 27, 2001	Staff Files Preliminary Staff Assessment (PSA)
April 9, 2001	BAAQMD Files Final Determination of Compliance (DOC)
May 9, 2001	Staff Files Final Staff Assessment (FSA)
May 23, 2001	Start Hearings
June 8, 2001	Conclude Hearings
August 14, 2001	Committee issues Presiding Member's Proposed Decision (PMPD)
September 6, 2001	Committee Conference on (PMPD)
October 10, 2001	Adopt Decision on PMPD
October 19, 2001	Executive Director Files Notice of Decision